

System and Method for Using First-Principles Simulation to Provide Virtual Sensors that
Facilitate a Semiconductor Manufacturing Process

ABSTRACT OF THE DISCLOSURE

A method, system, and computer readable medium for facilitating a process performed by a semiconductor processing tool. The method includes inputting data relating to a process performed by the semiconductor processing tool, and inputting a first principles physical model relating to the semiconductor processing tool. First principles simulation is performed using the input data and the physical model to provide a virtual sensor measurement relating to the process performed by the semiconductor processing tool, and the virtual sensor measurement is used to facilitate the process performed by the semiconductor processing tool.

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